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ABSTRACT

This 1984-85 annual report from the Scottish Council for Research in Education (SCRE) contains lists of officers, members, principal officials and staff; the chairman's report for 1984-85; a summary of projects in tabular form and a series of brief reports on projects; a note on overseas counsultancies; a list of SCRE publications; a note on awards; a list showing liaison with other organizations; a list of staff publications and conference papers; and a note on research seminars. Accounts for the year ending March 31, 1985, and a list of education-related research studies presented for post-graduate degrees in Scottish universities are also provided. Topics of research projects include: mathematics surveys; writing instruction; ergonomics; school assessment; counseling and guidance; special education opportunities; education work relationship; test performance; education information dissemination; and research services. (CB)

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# THE SCOTTISH COUNCIL FOR RESEARCH IN EDUCATION

# FIFTY-SEVENTH ANNUAL REPORT 1984-85

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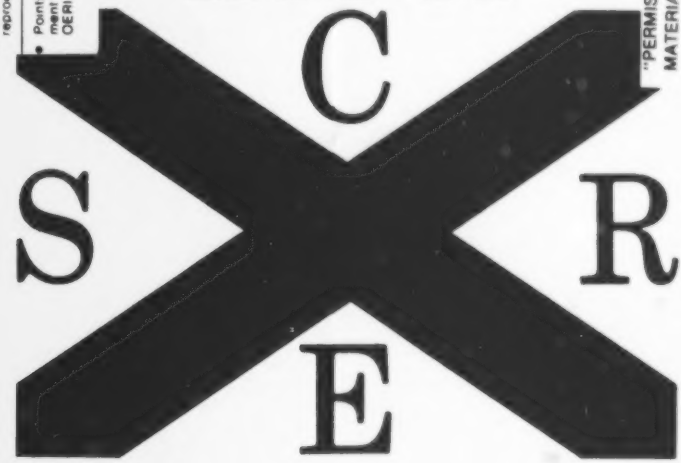


SP 028 427

ISSUED SEPTEMBER 1985



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# THE SCOTTISH COUNCIL FOR RESEARCH IN EDUCATION

FIFTY-SEVENTH ANNUAL REPORT
1984-85

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# OFFICERS AND MEMBERS

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**CHAIRMAN OF COMMUNICATIONS COMMITTEE**
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**CHAIRMAN OF RESEARCH COMMITTEE**
Margaret Cameron-Jones, MA, MEd

**MEMBERS OF COUNCIL**

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William R Dunn, BSc, MEd, Department of Education, University of Glasgow
John Hume, CA, ACMA, United Wire Group Ltd, Edinburgh
David A Kennedy, MA, PhD, CChem, FRSC, MIBioP, Robert Gordon's Institute of Technology, Aberdeen
Gordon Kirk, MA, MEd, Moray House College of Education, Edinburgh

**Nominated by the Convention of Scottish Local Authorities**
Frank Pignatelli, MA, MEd, Strathclyde Region Education Department
Bernard M Scott, Strathclyde Regional Council

**Nominated by the Association of Directors of Education in Scotland**
John Perry, MA, MEd, Lothian Region Education Department
D I M Sutherland, MA, MEd, General Teaching Council for Scotland (formerly Highland Region Education Department)

**Nominated by the Colleges of Education**
Jean Carroll, BSc, DPE, CertEd, Dunfermline College of Physical Education
James M Ewing, MEd, BSc, ABPsS, Department of Psychology, Dundee College of Education
William A Illsley, BA, MA, PhD, Dundee College of Education

**Nominated by the Scottish Universities**
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Leo B Hendry, MSc, MEd, PhD, Department of Education, University of Aberdeen
George O B Thomson, MA, MEd, PhD, ABPsS, Department of Education, University of Edinburgh

**Nominated by the Scottish Examination Board**
Melville R M Hendry, MA, Scottish Examination Board

**Nominated by the Educational Institute of Scotland**
Thomas M Linton, MA, MEd, FEIS, Moray House College of Education, Edinburgh
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William Shaw, BSc, DipEd, Chapelside Primary School, Airdrie

**Nominated by Teacher Organisations other than the EIS**
Joyce J M Armstrong, DCE, Leith Primary School, Edinburgh
Harry A Ashmall, MA, MLitt, Morrison's Academy, Crieff

**Assessors from the Scottish Education Department**
R S Johnston, HMCI, New St Andrew's House, Edinburgh
J Linn, SED, 43 Jeffrey Street, Edinburgh
R Merrall, New St Andrew's House, Edinburgh

## PRINCIPAL OFFICIALS

**Director**
W Bryan Dockrell, BA, MEd, PhD, FEIS

**Depute Director**
Gerard J Pollock, MA, MEd, MInstP, FEIS

**Assistant Director**
John L Powell, MA, MEd

## OTHER STAFF (as at 30th June 1985)

**Research**
Harold Black, BSc, MEd
Malcolm Corrie, BA, MA, DipEd

Marion Devine, BEd
John Hart, BSc
Carolyn MacDonald, MA, MPhil
Angela Roger, BA, DipEd
W Graham Thorpe, BSc
Stefan Zaklukiewicz, MA, MSc

**Technical**
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Sheila Day
*Susan Freshwater, MA, MIL
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Sonia Gill
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*Heather Hatherly
Doreen Mack
Marie Thomas
Hilary Thompson
*Kay Young
May Young

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* part-time

# THE SCOTTISH COUNCIL FOR RESEARCH IN EDUCATION

# Fifty-seventh Annual Report 1984-85

**COUNCIL (Chairman — Mr Gordon Kirk)**

**Chairman's Report**

The Freeman Report of 1984, which involved the critical scrutiny of SCRE by an independent investigator, placed an obligation on SCRE to undertake an appraisal of its central purposes and functions and how these might be more effectively and efficiently conducted in the contemporary educational context. That appraisal, which has considerably exercised the Council over the past year, concluded that SCRE, as a national educational research establishment, should contribute significantly to the determination of national research priorities, should continue to serve the educational system by conducting authentic research, by providing support and advice for practitioners concerned to develop their professional work and by widely disseminating the findings of research, and should regulate its activities in accordance with a coherent plan of development. It is gratifying to be able to report that SED has welcomed the Council's positive response to the Freeman Report and has endorsed the role of the Council "as the authoritative national forum for the consideration of educational research policy", and as an authentic research agency. However, it has been made clear that future government funding of SCRE is heavily conditional on its capacity to reorientate its activities along the lines indicated and to make appropriate adjustments to its staffing and its organisational structure. The Council is giving urgent consideration to these matters and is confident that, in the coming months, it can demonstrate sufficient commitment to its new roles and to its new structure and procedures to guarantee its future.

Despite the attention that has been devoted to these important matters,

the Council has had another extremely successful year. As is made clear on succeeding pages of this report, the Council's research effort is as vigorous and as responsive to national needs as ever; the output of books and other publications from Council staff continues to grow; and receipts from the sale of books emanating from the Council have reached a record level, with the Council's leaflet on classroom assessment selling in the region of 20,000 copies. In addition, the Council has continued to support research activities throughout the country. In this connection the most noteworthy event was the Council of Europe workshop on Science and Computers in Primary Education, sponsored by SCRE in association with the SED and attracting participants from a dozen countries. Finally, the Research Committee has already initiated discussions about the development of research programmes as distinct from individual pieces of research.

The success of the Council over the years is attributable to the efforts of very many people. At this point I should like to record the Council's indebtedness to Hugh Fairlie, who was Chairman from 1978 to 1984, and to the other retiring members of the Council for the interest they have shown in the work of SCRE and for what they have contributed to it. Finally, I am pleased to record, on behalf of the Council, our appreciation of the efforts of the Director and his staff and to congratulate them on their achievements. Everyone concerned with the quality of education in Scotland will hope that even greater achievements will be possible in the years ahead. The Freeman Report and the self-scrutiny it engendered have opened up fresh challenges for SCRE: we cannot fail to respond to them.

## SUMMARY OF SCRE PROJECTS 1984-85

| *Title of Project* | *Principal Researcher(s)* | *Starting Date* | *Approximate Duration* | *Source of Finance* | *Report Page* |
|---|---|---|---|---|---|
| Second (IEA) Mathematics Survey | W G Thorpe | 1978 | 6 yrs | SCRE | 11 |
| Writing Across the Curriculum, Stage II: Teaching Writing for Learning | E Spencer<br>A Roger | 1981 | 3 yrs | SED | 11 |
| Mathematics 1983 Assessment | G J Pollock<br>B Duncan | 1982 | 3 yrs | SED | 12 |
| Scottish Restandardisation of the WISC-R | W G Thorpe | 1982 | 3 yrs | SCRE | 13 |
| Lothian Region Ergonomics Project | M Corrie | 1983 | 1 yr 6 mths | Lothian Region | 13 |
| Schools' Assessment Research and Support Unit (SARSU) | H D Black | 1983 | 3 yrs | COSLA/SCRE/SED | 13 |
| Guidance and Choice in the 16-18 Action Plan | A C Ryrie | 1984 | 3 yrs | SCOTBEC/SED | 14 |
| Educational Opportunities for Young People with Special Educational Needs (EDSPEN) | M Corrie | 1984 | 2 yrs 2 mths | SED | 15 |
| EEC Transition from School to Adult Life Evaluation | H D Black | 1984 | 3 yrs | Strathclyde Region | 16 |
| Choice and Guidance in SCVS Courses in FE Colleges | A C Ryrie | 1984 | 9 mths | SCOTBEC | 17 |
| Changes in Performance on Certain WISC Items | S Freshwater | 1985 | 3 mths | SCRE | 17 |
| Assessment in the Action Plan (pilot project) | H D Black | 1985 | 3 mths | SCRE | 17 |
| EURYDICE | E R Wake | — | — | SED | 17 |
| Research Services Unit | G J Pollock | — | — | SCRE | 18 |

## REPORTS ON PROJECTS

### Second International (IEA) Mathematics Survey

W G Thorpe (Principal Researcher), S Freshwater (SRO: G J Pollock)

The aims of this project, which started in 1978, include a systematic investigation of the relationships between performance in mathematics at secondary school and factors such as home background, characteristics of the school system and pupil motivation. Information was gathered through surveys of random samples of pupils and teachers in S2, S4 and S5/6 in 1981. The analysis is now complete.

Three international reports will be available in 1985-86. A Scottish report on the performance of children at various levels of ability has been drafted.

### Writing Across the Curriculum, Stage II: Teaching Writing for Learning

E Spencer (Principal Researcher until 31.5.84), A Roger (Principal Researcher from 1.8.84), C MacDonald (SRO: J L Powell)

This project, which was funded by the SED, grew out of the earlier descriptive study, Writing Across the Curriculum, Stage I, reported in *Writing Matters Across the Curriculum* and *Written Work in Scottish Secondary Schools*.

The project research team, in collaboration with teachers, developed and tested classwork designed to develop certain skills such as note-taking, planning and organisation of ideas considered to be central to both writing and learning in various subjects. These skills, while of value for communicating information, also have evident functions in the grasping and clarifying of ideas and integrating them into one's existing set of knowledge.

The activities which were offered to teachers to try out in order to encourage, motivate and support their pupils in becoming better learners and writers were drawn from several sources and compiled as a "package" of ideas and activities for teachers. These suggestions were adopted and developed in various ways by individual teachers in Business Studies, Chemistry, English, Geography, History, Home Economics and Physics departments in a number of schools. Where possible, the participating pupils practised the special writing activities in at least two subjects.

The report of the project presents a detailed account of the theoretical rationale and describes the process by which it was implemented in classrooms and evaluates its effect. The description includes information about teachers' and pupils' attitudes to the work, descriptions of the classroom use of the techniques, and analysis of pupils' written work. Some attention is also paid to pupils' general learning strategies as well as to "writing for learning". Another strand of the project was developed

in English classrooms, where the principles of teaching writing for learning were applied in the particular context of teaching narrative writing.

The report indicates that the project's approach to learning and writing was practical and useful. It is intended that the principal outcomes of the project, in addition to the main report, will be booklets and a leaflet for teachers describing the two strands of the project "across the curriculum" and "narrative writing", together with packages of ideas and activities for teachers containing many practical suggestions for classroom use.

**Mathematics 1983 Assessment**
G J Pollock, B Duncan (Principal Researchers), W G Thorpe, E Charleson, S Day, M Ireland

This study investigated the feasibility of monitoring standards in mathematics at the P4, P7 and S2 stages.

The work, which began in April 1982, represents an extension of the studies undertaken by the Council on behalf of the Scottish Education Department in 1978 and 1981.

A multi-matrix sampling procedure was adopted which allowed a more detailed examination of performance in particular areas of the curriculum to be undertaken. Sets of written tests representing various aspects of mathematics were prepared for each age group. These sets contained sufficient items from previous studies to allow comparisons over time to be made at any one stage. In addition there were sufficient overlapping items in the P4 and P7 and in the P7 and S2 tests, to allow comparisons by stage to be made.

Apart from evaluating performance at national and at school level, individual performance in selected areas of the mathematics curriculum was analysed.

Approximately 120 classes (2,000 pupils) at the P4 stage, and 150 classes at the P7 and S2 stages (3,500 and 4,500 pupils respectively) were involved in the assessment.

Running in parallel with the written assessment, an experimental assessment of practical mathematical skills has been carried out. Fieldworkers visited approximately two-thirds of the schools involved in the written tests and assessed pupils' ability to carry out simple practical operations. In each school between 5 and 10 pupils were involved in this aspect of the study.

Both the written and practical assessments were carried out in the period May-June 1983. Three reports were presented to SED in April 1985. They dealt with the P4/P7 comparisons, P7/S2 comparisons and the Practical Testing respectively.

**Scottish Restandardisation of the WISC-R**
W G Thorpe (Principal Researcher), S Freshwater (SRO: W B Dockrell)

The Wechsler Intelligence Scale has been used extensively throughout the world since its first appearance in 1949. In 1974 it underwent a major revision and restandardisation in the USA. The purpose of the present exercise is to provide norms suitable for Scottish use and to verify whether any alterations to the test are required. In doing this the Council is meeting a request from the Scottish child psychologists, particularly those in child guidance.

The fieldwork for the study, which consisted of administering the test to approximately 1,600 children between the ages of 7 and 16 years, was completed in mid-1984. Entering the data into the computer and checking for accuracy has occupied the time since. Analysis proper will commence at the start of 1985-86; preliminary results meanwhile do indicate that the USA norms are not correct for use with Scottish children.

Attention has also been given to the instruction manual which accompanies the test and to the details of the test wording. If the copyright holders (Psychological Corporation of America) agree, Scottish amendments to these will also be produced.

The final reports and the end of the project are planned for Autumn 1985.

**Lothian Region Ergonomics Project**
M Corrie (Principal Researcher) (SRO: J L Powell)

This project, conducted in co-operation with the Lothian Region Educational Advisory Service, was completed in August 1984. The aim was to evaluate the uptake and practical use of the teaching modules on Ergonomics developed at Napier College by Clive Andrews for use in Lothian schools. Since the uptake of the modules by teachers was very limited, the focus shifted to an attempt to explore the reasons for these problems and to discuss any lessons that might be learned.

In reporting to Lothian Region and Napier College, it was suggested that a more effective strategy for the introduction of the materials would have meant extending the organisational focus to include not only efforts to encourage individual teachers, but also to involve heads and senior staff to a greater extent; collaborative planning with, and support for, teachers; a co-ordinated approach to the problems of uptake; and earlier and closer links between evaluation and development of the materials.

**Schools' Assessment Research and Support Unit (SARSU)**
H D Black (Head of Unit), M Devine

The activities of the Schools' Assessment Research and Support Unit currently cover three main categories: action research, exploratory studies and support for in-service programmes.

The action research programme which is presently underway involves collaborating with a small number of schools in the construction of criterion-referenced diagnostic instruments for Geography, History and Modern Studies. The syllabus for these courses is based on the new Standard Grade guidelines at present being piloted in schools. It is hoped to develop a resource of these instruments which will be of use to other schools teaching similar courses.

The first of the exploratory studies which considers the possible relationships between diagnostic and summative assessment at Standard Grade is now complete. As well as producing a report on the findings of this study, the Unit has also completed a short leaflet intended mainly for classroom teachers on the advantages and disadvantages of the various relationships.

The second exploratory study involved an in-depth study of diagnostic or formative assessment as practised by a small number of English departments with a particular commitment to this type of assessment. This report is nearing completion. A parallel study of practice in a similar number of Mathematics departments will be initiated shortly.

The Unit has also initiated a one-year study of assessment in Drama in collaboration with David Starsmeare of Moray House College. It is intended to explore ways in which central aspects of school drama courses in S3 and S4 might be assessed using a "grade-related criterion" model.

Support for local authority in-service programmes is offered in the form of papers and workshops arising from the past and present work of the Unit. These contributions can be incorporated into the local authorities' own programmes of staff training. The Unit has also produced an introductory leaflet, *An Introduction to Classroom Assessment for the Eighties*, which is available from the Council.

**Guidance and Choice in the 16+ Action Plan**

A C Ryrie (Principal Researcher until June 1985), A Roger (Principal Researcher from June 1985), J Hart

This project, which is funded jointly by the Scottish Education Department and the Scottish Vocational Education Council for three years, is a study of aspects of the 16+ Action Plan in further education colleges. The Action Plan, which came into operation in the autumn of 1984, provides a structure of 40 hour modules, through which it is intended to create greater flexibility and to offer a larger measure of curricular choice for students. It is intended also that arrangements for guidance should be developed, to help students make choices about their modular programmes and their future.

The main work of the project is focused on three further education colleges, but contact has already been established with a large number of others. The aim is to study and observe how arrangements for flexibility

and choice and for guidance are being developed. This is being done through a series of interviews and questionnaires, and also through informal discussion, attendance at college meetings etc. In this way the attempt is being made not only to gather information but also to feed back comments, ideas and suggestions to policy makers and practitioners, both in colleges and in regional authorities. Discussion papers for use in the colleges have also been prepared. A report is to be produced at the end of each year of the project. The first year report, produced in the summer of 1985, documents the limited opportunities provided for student choice in the first year of the operation of the Action Plan and contains a discussion of the problems associated with the introduction of choice. The different guidance structures and the diversity of guidance practice in the colleges are also discussed.

**Educational Opportunities for Young People with Special Educational Needs (EDSPEN)**

M Corrie (Principal Researcher), S Zaklukiewicz (SRO: W B Dockrell)

The chief aim of the project, which is funded by the Scottish Education Department, is to report on policy and provision relating to the range of opportunities for education and training for young people in the 16-18 age group who have special educational needs, and to discuss the issues and implications for further practical development. The report is intended to serve as an informative and comprehensive document for education authorities in relation to provision for young people with special needs.

The project is concerned with a wide range of provision, but in particular with the following sectors:

—college-based provision for those leaving school at 16 through mainstream and special courses

—school-based provision for those staying on at school whether in special or ordinary schools, including school/FE links

—educational provision in adult training centres, day centres and sheltered worshops

—vocational training and educational schemes provided through the Manpower Services Commission, particularly the Youth Training Scheme

Work on the project so far has principally involved the collection of information through: (a) written enquiries to regional education and social work departments; (b) postal questionnaires to schools and adult training centres; (c) interviews with staff in schools and colleges concerned with young people in the relevant age group. Further work may involve a postal questionnaire to colleges of further education, interviews with specialist careers officers and college staff regarding YTS provision for those with special educational needs, and visits to specific institutions to seek examples of interesting developments.

**Publications**

Corrie, M and Zaklukiewicz, S "Qualitative Research and Case Study Approaches: An Introduction" in *Research Methods in Special Education: Quantitative and Qualitative Techniques in Case Study Work* (eds Hegarty, S and Evans, P).

Corrie, M "Out of School, Out of Work", *Educare*, 22nd April 1985.

Corrie, M "The Transition from Special School: Case Studies of the Transition Process", *Educare*, 23rd June 1985.

In the past year a number of papers have been given to specialist groups (eg, conferences of Adult Training Centre managers and Careers Officers). A range of working papers and other material has been produced on the basis of research previously conducted in this area. Details of these are available from the project team.

**EEC Transition from School to Adult Life Evaluation**

H D Black (Principal Researcher), C MacDonald

This study, financed by Strathclyde Regional Council through Urban Aid, is concerned with the evaluation of the Castlemilk Transition to Adult Life Project, the Scottish part of a network of 30 projects set up by the European Community throughout the ten member countries, with the common theme of the transition from education to adult and working life.

The evaluation involves a series of formative studies (negotiated with the Project Co-ordinator) of interest to the project as it moves forward.

During the first year of the evaluation (which began in August 1984) four studies have been undertaken. The first was concerned with documenting the concerns of the Steering Group at the beginning of the project and with highlighting issues which were worthy of further consideration by both the evaluators and the project planners. The second looked at the responses of fifth year winter leavers to the special courses provided for them through the project. The third study was focused on the attendance at a local further education college by pupils from the Castlemilk project. In this the views and perceptions of both pupils and the further education lecturers concerned with teaching them were gathered in order to judge the success of, and the problems associated with, such provision. The fourth study involved an investigation of the views of project teachers on the aims and success of the project as well as their satisfaction with the support received from the project administration.

Some of the reports on the evaluation studies will be for internal use only, while others will lead to published reports which can be used to disseminate the ideas developed during the initiative to a wider audience. A booklet, *Something for the Winter Leavers*, has already been published.

**Choice and Guidance in SCVS (Scottish Certificate of Vocation Studies) Courses in Further Education Colleges**
A C Ryrie (Principal Researcher), J Hart

This short project, which began in January 1984 and was completed in September 1984, was carried out with funds from the Scottish Business Education Council. The researchers examined arrangements for choice and guidance for students following vocational preparation courses in further education colleges, leading to the Scottish Certificate of Vocational Studies. These courses and the certificate have now been superseded by the 16+ Action Plan, but this short project served as a preliminary study for the larger project on Guidance and Choice in the 16+ Action Plan. The report, *Choice and Guidance in SCVS Courses* identifies the main issues regarding choice and guidance. These include: the different types of choice, the various reasons for offering choice and its significance for students, the different approaches to guidance, the value of profiling and reviewing, and the need for staff development in relation to guidance.

**Changes in Performance on Certain WISC Items**
S Freshwater (Principal Researcher), W G Thorpe (SRO: W B Dockrell)

The purpose of this short project funded by SCRE was to compare the performance of Scots children in 1961-62 and in 1984 on certain selected WISC/WISC-R items. Analysis will go ahead once data from the 1984 Restandardisation (see page 13) is available.

**Assessment in the Action Plan (pilot project)**
H D Black (Principal Researcher), A C Ryrie, J Crowther

Arising from the Council's long-standing programmes of research in assessment and in further education, a small scale study on assessment and teaching in the "Action Plan" was undertaken early in 1985.

Senior staff in each department in one large FE college were interviewed about their experience of introducing Action Plan modules. They were asked how they felt the modular approach had influenced their teaching and their learning; whether the notion of student-centred learning was being used; how summative assessment was being carried out; and whether these innovations had changed the attitudes of students or the relationships between students and lecturers.

This small scale study will point up some of the issues to be addressed and may be a useful introduction to larger scale work. A report is presently in preparation.

**EURYDICE**
R Wake (Head of Unit), J Simons

EURYDICE is the Education Information Network of the European Community. It exists to facilitate the exchange of information about

policy and practice in the member States of the Community. Access to the network is available to policy-makers at Community, national (ie central government, including the CCC as the main advisory body on curriculum to the Secretary of State) and local government level, and to policy-makers in higher education. The work of the Scottish Unit is funded by the SED and monitored by a small steering committee comprising representatives of SCRE, the SED, and local authorities.

In the year reported the Scottish Unit, in addition to responding to enquiries and channelling Scottish requests to other Units, has engaged in two main activities: (i) the continuing development of the Unit itself, including a limited extension of authorised users; and (ii) the investigation, together with other Units, of ways to improve the service. By the end of 1985 it is hoped that, in addition to the existing question/answer service, the Unit will be able to provide basic information on current policy, practice and developments in the Community more speedily through dossiers of information maintained at the Edinburgh Unit. This will be facilitated by the computerisation of records using a microcomputer purchased with the aid of a grant from the SED.

**Research Services Unit**

G J Pollock (Head of Unit), W G Thorpe, S Freshwater, M Ireland, E Charleson, S Day

The Research Services Unit continues to provide a service for bodies working in the educational field. The work which the Unit undertakes can be classified under three main headings:

1. Professional advice and consultancy—
   - (a) on the design and planning of research projects
   - (b) on the evaluation of external research projects
   - (c) on the selection and use of test materials
   - (d) on the selection procedures for training programmes
2. Statistical services and data processing—
   - (a) consultation and general advice on statistical matters
   - (b) assistance in the analysis of data
   - (c) validation of selection procedures
3. Collaboration with other bodies in research projects—
   - (a) service on research committees and steering committees
   - (b) collaboration in joint projects with external bodies
   - (c) the carrying out of surveys and other contract work for external bodies

The WISC-R project, reported separately, and Factors Affecting School Achievement, provided the mainstay of work for the Unit through the year. Factors Affecting School Achievement is a study of the feasibility of using the 1981 census data to provide indications of the children's school performance. Experience has been gained in defining

school catchment areas in terms of the electoral districts of the census and in aggregating and extracting potentially useful variables. The next stage is the examination of the actual validity of these for predictive purposes.

Among the other projects undertaken were the analysis of a questionnaire on alternative procedures for reporting on students completing teacher training for the Sub-committee on First Appointments of the Joint Committee of the Colleges of Education, a survey on behalf of the National Trust of the use made by schools of their properties, and the drawing of a number of samples for various bodies.

During the year the Council won the contract from the Manpower Services Commission to hold the data base for the Scottish section of their TVEI. The technical side of this is being done by the Research Services Unit using Oracle on the Regional Computer Centre facilities.

Feasibility studies were carried out for two future surveys. The contract has been placed for one of these.

The Unit has, over the past several years, gained expertise and experience in test construction, particularly in Mathematics. Consideration is being given to publishing a set of such tests for use in the primary school.

**Additional Projects undertaken since 31st March 1985**

Since the end of the year reported SCRE has been contracted to engage in two further activities: the TVEI Non-Financial Data-base (MSC); and an evaluation of TVEI in Lothian Region.

## OVERSEAS CONSULTANCIES

In the period April to July 1985, Mr H D Black has participated in a course (relating to diagnostic assessment) that was provided for Asiatic countries at Innotech in the Philippines and Mr G J Pollock has conducted a three-week evaluation of assessment procedures in primary education in Sierra Leone. Mr Pollock also participated in a workshop on Transition from School to Work organised by the European Co-ordination Centre for Research and Documentation in the Social Sciences held at Castel Gandolpho, Italy.

## SCRE PUBLICATIONS 1984-85

The following items, listed in order of issue, have been published by SCRE in the twelve months from 1st August 1984:

*Criterion-referenced Assessment in the Classroom* (H D Black and W B Dockrell)

*An Introduction to Classroom Assessment for the Eighties* (A four page leaflet)

*The Seventh Sense: reflections on learning to learn* (J Nisbet and J Shucksmith)

*The New Approach in Further Education* (A C Ryrie)
*Administering Change in Assessment* (H D Black, W Alexander, E Boyle, and R Goring)
*The Teacher's Craft* (J L Powell)
*Ways of Teaching* (J L Powell)
*Formulating a National Research Policy: the case of Sweden* (I Marklund)
*Science and Computers in Primary Education* (ed F Adams) (Papers and background papers from a Council of Europe/SCRE workshop held in Edinburgh in September 1984)
*Opening the Primary Classroom* (J Raven)
*Scottish Postgraduate Research into Maladjustment 1974-83* (A Peacock and K Denvir)
*Something for the Winter Leavers* (J Crowther, C MacDonald, and H D Black)
*Understanding Children Spelling* (J Barr)

## SCRE AWARDS

### SCRE Silver Medal

The Council's Silver Medal, awarded annually to a Scottish researcher (or a non-Scot working in Scotland) in respect of published research work, has, for 1985, been awarded to Pamela Munn, formerly of Stirling University, for research on factors affecting collaboration among teachers in multi-disciplinary courses in secondary schools. The research, which was funded by the SED as part of the Munn/Dunning development programme, was completed in 1984 and has produced one published report *Approaches to Collaboration in Scottish Secondary Schools in Multi-Disciplinary Courses 14-16* (available from the Education Department at Stirling University) and a number of working papers. Pamela Munn previously spent six years teaching in comprehensive schools followed by research work on accountability funded by the then SSRC. She is now Lecturer in Applied Research in Education at the University of York.

### Research Prize

The 1985 winner of the SCRE Research Prize, which is awarded for the best non-doctoral thesis in the field of education presented to a Scottish university in the preceding year, is Elsie A Farquharson of Dundee University for her MEd thesis *The Primary Memorandum Revisited*.

**LIAISON WITH OTHER ORGANISATIONS, 1984-85**
**(including consultative and advisory services undertaken by staff)**

CCC Committee on Primary Education (J L Powell)
CCC Committee on Secondary Education (W B Dockrell)
CCC Consultative Panel on Drama (W B Dockrell)
Central Region Collaborative Research Advisory Committee (G J Pollock)
City and Guilds Policy Committee for Education and Training (W B Dockrell)

ERCC Treasury Supported Users Committee (W G Thorpe)
EURYDICE Steering Group (R Wake)

International Association for Educational Assessment (IAEA), Executive Committee (Vice-President) (W B Dockrell)
International Association for the Evaluation of Educational Achievement (IEA), General Assembly (W B Dockrell)
IEA Mathematics, International Committee (G J Pollock)
IEA Transition from School, International Committee (G J Pollock)
IEA Mathematics, Scottish National Committee (W G Thorpe)

Aberdeen College of Education *Assessment in Social and Vocational Skills Project*, Advisory Committee (H D Black)
Moray House College of Education *Assessment in Home Economics Project*, Advisory Committee (H D Black)
Moray House College of Education Research and Development Committee (A C Ryrie; A Roger from June 1985)

National Inter-College of Education Committee for Educational Research (H D Black)

SCOTBEC Policy Review Committee (G J Pollock)
Scottish Council for Open Learning *Co-ordination of Open Learning Project* (A C Ryrie)
Scottish Council for Educational Technology, Innovation and Development Committee (W B Dockrell)
Scottish Institute for Adult Education, Editorial Board (R Wake)
Scottish Parent-Teacher Council, Executive Committee (W B Dockrell)
SERA Executive Committee (J L Powell)
Stirling University *Project on Multi-Disciplinary Courses*, Advisory Committee (A C Ryrie)
*Studies in Education Evaluation* (Pergamon Press), Associate Editor (W B Dockrell)

## STAFF PUBLICATIONS AND CONFERENCE PAPERS NOT OTHERWISE LISTED

**W B Dockrell**

*PUBLICATIONS*

"Yes, Minister," *Times Educational Supplement, Scotland*, October 1984.

"Applicability of Standards for Evaluation of Educational Programs, Projects and Materials in an International Setting," *Evaluation and Programme Planning*, Vol 7, 347-354, 1984.

"Ethical Considerations in Research," in the *International Encyclopaedia of Education*, Pergamon Press, 1985.

"Styles in Educational Research on Two Sides of the Atlantic," in *Advances in Reading/Language Research*, Vol 3, JAI Press (in press).

*CONFERENCE PAPERS*

*Assessing What Teachers Teach*, International Association for Educational Assessment, Annual Conference, Perth, Western Australia, 1984.

*Who Wants to Know?*, Scottish Educational Research Association, 1984.

*Another Country — Assessing Drama in Scotland*, with D Starsmeare, International Association for Educational Assessment, Regional Conference on Assessment in the Arts, Miami, 1985.

*Recent Developments in Assessment and Examination Procedures: An International Perspective — Change in Scotland*, American Educational Research Association, Chicago, 1985.

## RESEARCH SEMINARS

In the past year SCRE has organised two events on aspects of educational research.

In May 1984, SCRE hosted a meeting, attended by teachers, academics and administrators, to hear Dr Inger Marklund, Head of the Research Division of the Swedish National Board of Education, speak on the Swedish experience of formulating a national educational research programme. Dr Marklund's paper has now been published by SCRE.

In May 1985, with the aid of a grant from the ESRC, the Council organised a two-day seminar on meta-analysis led by Dr Carol Fitzgibbon of the University of Newcastle, who had been spending a term as visiting scholar at SCRE. The principal participants were Professor Larry Hedges (University of Chicago) and Dr Betsy Becker (University of Michigan).

## Scottish Council for Research in Education

# ACCOUNTS FOR THE YEAR ENDED 31st MARCH 1985

### BALANCE SHEET AS AT 31st MARCH 1985

| | £ | *1985* £ | *1984* £ |
|---|---|---|---|
| *Fixed Assets* | | | |
| Tangible Assets: | | | |
| Office Furniture, Furnishings and Equipment (Note 4) | | — | 7,575 |
| *Current Assets* | | | |
| Sundry Debtors | 30,698 | | 21,027 |
| Cash at bank and in hand: | | | |
| Cash on Deposit | 16,125 | | 1,591 |
| Cash in Bank Current Account | 40,751 | | 56,493 |
| Cash in Hand | 13 | | 59 |
| | 87,587 | | 79,170 |
| *Creditors:* amounts falling due within one year | | | |
| Sundry Creditors | 25,003 | | 18,087 |
| *Net Current Assets* | | 62,584 | 61,083 |
| *Total Assets* less *Current Liabilities* | | 62,584 | 68,658 |
| *Capital and Reserves* (Note 5) | | | |
| Publications Fund | 13,110 | | 13,362 |
| Maintenance and Replacement Fund | 6,500 | | 6,000 |
| General Fund | 42,974 | | 49,296 |
| | | 62,584 | 68,658 |

(signed) Gordon Kirk

John Hume

## Scottish Council for Research in Education

### INCOME AND EXPENDITURE ACCOUNT
### FOR THE YEAR ENDED 31st MARCH 1985

| | *Note* | *1984-85* £ | *1983-84* £ |
|---|---|---|---|
| **Income** | | | |
| Support Grants and Donations | 1 | 324,389 | 330,579 |
| Contributions towards costs of projects | 2 | 149,313 | 215,360 |
| Other Income | 3 | 867 | 1,080 |
| Interest on Deposits | | 309 | 254 |
| | | 474,878 | 547,273 |
| **Expenditure** | | | |
| Specially Funded Research Projects | 2 | 181,700 | 254,034 |
| Other Projects, Services and Grants | 3 | 100,461 | 107,147 |
| | | 282,161 | 361,181 |
| General Expenditure —balance after allocation of £30,405 (1983-84 £40,588) to Research Projects and other services | | 199,039 | 193,014 |
| | | 481,200 | 554,195 |
| **DEFICIT for Year** | 5 | (6,322) | (6,922) |
| *NOTE:* General Expenditure includes: | | | |
| Depreciation | | 7,575 | 7,575 |
| Audit and Accounting Fees | | 2,747 | 2,741 |

### REPORT OF THE AUDITORS TO THE MEMBERS OF THE SCOTTISH COUNCIL FOR RESEARCH IN EDUCATION

We have examined the foregoing Balance Sheet, Income and Expenditure Account, and the attached Notes on Accounts which have been prepared under the historical cost convention. In our opinion the Accounts comply with the Companies Acts 1948 to 1981 insofar as the provisions of these Acts apply to these financial statements, and together with the Cash Account give a true and fair view of the state of affairs of the Company as at 31st March 1985 and of the Deficit and of the Source and Application of Funds for the year ended that date.

SMITH, HEMMING & DEAN, CA,
18 Alva Street,
Edinburgh, EH2 4QN.
*31st May 1985.*

## ACCOUNTING POLICIES

A. *Basis of Accounting*
The Council is constituted as a company limited by guarantee and to comply with normal Companies Act accounting conventions, prepares its accounts on the historical cost basis using the accruals concept.

B. *Depreciation*
With effect from 1st April 1983, Office furniture, furnishings and equipment are written off to Income and Expenditure Account in the year in which they were acquired. Assets held at 1st April 1983 have been depreciated on a straight line basis over a period of two years and have now been fully written off.

C. *Taxation*
The Council has charitable status as an educational body and accordingly has no Corporation Tax liabilities on revenue surpluses or untaxed interest.

D. *Publications Fund*
In order to avoid depletion or distortion of the Council's income and expenditure in any one year, the costs of publishing research findings are normally charged to the Publications Fund. The Fund is maintained from sales of these publications as and when they take place, from grants, and from periodical transfers from the Income and Expenditure Account. No value is placed on stocks of unsold publications.

E. *Maintenance and Replacement Fund*
The Maintenance Fund has been set up to meet extraordinary expenditure.

F. *Statement of Source and Application of Funds*
To comply with a standard accounting practice, the Council should prepare a statement showing the source and application of funds. The format normally used by commercial organisations is not considered appropriate for the Council, and Note 7 summarises cash transactions (Receipts and Payments) for the year in a way which it is believed satisfies the objectives of the standard accounting practice referred to.

## NOTES ON ACCOUNTS

| 1. **Support Grants and Donations** | | *1984-85* | *1983-84* |
|---|---|---|---|
| | | £ | £ |
| Scottish Education Department | | 290,000 | 297,500 |
| Scottish Regional Education Authorities | £ | | |
| Borders | 528 | | |
| Central | 1,720 | | |
| Dumfries and Galloway | 920 | | |
| Fife | 2,154 | | |
| Grampian | 3,112 | | |
| Highland | 1,235 | | |
| Lothian | 4,695 | | |
| Shetland | 145 | | |
| Strathclyde | 14,700 | | |
| Tayside | 2,500 | | |
| Western Isles | 180 | | |
| Orkney | 130 | | |
| | | 32,019 | 30,769 |
| **Educational Institute of Scotland** | | 1,500 | 1,500 |
| **Local and District Associations of Educational Institute of Scotland:** | | | |
| Borders | 35 | | |
| Aberdeen | 10 | | |
| Shetland | 5 | | |
| Banff | 85 | | |
| Central | 40 | | |
| Gordon | 35 | | |
| Kincardine and Deeside | 10 | | |
| Orkney | 50 | | |
| East Lothian | 10 | | |
| | | 280 | 270 |
| **Other Grants** | | | |
| Scottish Educational Research Association | 550 | | |
| Association of Assistant Headteachers Early Education | 40 | | |
| | | 590 | 540 |
| | | 324,389 | 330,579 |

| 2. **Specially Funded Research Projects** | *Expenditure* £ | *Recoverable* £ |
|---|---|---|
| *SED* | | |
| Edospen* | 33,060 | 18,172 |
| 1983 Maths Assessment | 31,755 | 24,530 |
| 16-18 Modules | 1,743 | 1,743 |
| Guidance and Choice | 14,550 | 14,550 |
| Eurydice | 10,277 | 10,050 |
| Youth Training Schemes | 3,983 | 3,528 |
| *SED/Local Authorities* | | |
| Writing Across The Curriculum, Phase II | 23,828 | 21,729 |
| COSLA Resource Unit* | 33,328 | 26,193 |
| *Local Authorities* | | |
| Ergonomics | 1,600 | 1,600 |
| *Others* | | |
| Pakistan Primary Education | 6 | 6 |
| Evaluation of Craigroyston Curriculum | 238 | — |
| SCOTBEC Modules | 16,148 | 16,148 |
| Castlemilk | 6,750 | 6,630 |
| Council of Europe | 4,387 | 4,387 |
| TVEI | 47 | 47 |
| | 181,700 | 149,313 |

* Project jointly funded by SCRE and Sponsor(s)

| 3. **Other Projects, Services and Grants** | | |
|---|---|---|
| Research Services Unit | | |
| General Services | 25,442 | 867 |
| IEA Mathematics Survey | 4,985 | |
| WISC Revision | 7,457 | |
| Factors Affecting Achievement | 15,396 | |
| Information Services and Library | 39,101 | |
| Grants | 393 | |
| Teaching Strategies in the Primary School | 802 | |
| Project Development Activities | 6,885 | |
| | 100,461 | 867 |

*Explanatory note on Expenditure*

Expenditure includes, in addition to the direct costs and recoverable overheads, a proportion of senior staff costs not normally charged to the sponsoring body.

| 4. **Office Furniture, Furnishings and Equipment Cost** | *1984-85* £ | *1983-84* £ |
|---|---|---|
| Cost at beginning of year | 44,451 | 44,451 |
| *Depreciation* | | |
| Balance at beginning of year | 36,876 | 29,301 |
| Depreciation charge for year | 7,575 | 7,575 |
| Balance at 31.3.85 | 44,451 | 36,876 |
| *Cost less Aggregate Depreciation* | — | 7,575 |

5. **Movement of Funds**

| | | |
|---|---|---|
| *Publications Fund* | | |
| Transfer from Income and Expenditure Account | — | 1,000 |
| Income during year | 22,458 | 15,902 |
| | 22,458 | 16,902 |
| *Less:* Expenditure | 22,710 | 23,540 |
| | (252) | (6,638) |
| Fund at beginning of year | 13,362 | 20,000 |
| Fund at end of year | 13,110 | 13,362 |
| *Maintenance and Replacement Fund* | | |
| Transfer from Income and Expenditure Account | 2,766 | 500 |
| Fund at beginning of year | 6,000 | 5,500 |
| | 8,766 | 6,000 |
| *Less:* Expenditure | 2,266 | — |
| Fund at end of year | 6,500 | 6,000 |
| *General Fund* | | |
| Fund at beginning of year | 49,296 | 56,218 |
| Deficit for year | (6,322) | (6,922) |
| Fund at end of year | 42,974 | 49,296 |

6. **Employees**

The average number of persons employed in each week of the financial year was 31 (36) and the aggregate remuneration was £337,130 (£336,098).

| 7. **Cash Account for Year ended 31st March 1985** | *1984-85* £ | *1983-84* £ |
|---|---|---|
| *Receipts* | | |
| Support Grants and Donations | 324,159 | 331,112 |
| Interest and Miscellaneous Income | 1,133 | 3,416 |
| Sales of Publications | 20,283 | 21,005 |
| Recovery of Project Costs | 152,896 | 231,178 |
| | 498,471 | 586,711 |
| *Payments* | | |
| General Expenditure— | | |
| Salaries and Other Employment Costs | 119,554 | 108,516 |
| Accommodation | 42,308 | 40,380 |
| Other | 26,750 | 38,579 |
| Research and Information Services | 77,585 | 79,302 |
| Publications | 22,710 | 35,714 |
| Maintenance Fund Expenditure | 2,266 | — |
| Expenditure on Specific Research Projects (including SCRE "Internal Projects") | 208,552 | 287,865 |
| | 499,725 | 590,356 |
| Deficit of Receipts over Expenditure | (1,254) | (3,645) |
| Opening Balance of Cash Funds | 58,143 | 61,788 |
| Closing Balance of Cash Funds | 56,889 | 58,143 |

*Note:* Differences between cash receipts and payments and the figures in the Income and Expenditure Account reflect the "accrual basis" used in the latter account — expenses unpaid at the year end appear as creditors and sums due not yet received in cash appear as debtors in the Balance Sheet.

# A LIST OF RESEARCHES RELATING TO EDUCATION

Presented for postgraduate degrees in Scottish Universities

1984

**Researches are Classified Broadly Under the Following Headings:**

*Adjustment/Maladjustment/Delinquency*
*Assessment*
*Curriculum Studies*
*Education Overseas*
*Guidance*
*History of Education*
*Home and School*
*Leisure*
*Organisation of Education*
*Post-Compulsory Education*
*Pre-School Education*
*Primary Education*
*Psychology (see also Adjustment/Maladjustment/Delinquency; Special Educational Needs*
*Research Methods*
*Secondary Education (not otherwise classified)*
*Sex/Gender Differences*
*Special Educational Needs*
*Theory, Principles and Philosophy of Education*
*Teacher Education*
*Teachers*
*Teaching*
*Transition: School to Working Life*
*Women*

## ADJUSTMENT/MALADJUSTMENT/DISCIPLINE

(1) **Fell, M** Multidisciplinary assessments for the Children's Panel in one Scottish area. MSc, Edinburgh

(2) **Gonzalez, S A** Towards an understanding of special education for maladjusted children. MEd, Dundee

(3) **Grant, P** Deviance as norm infraction in secondary schools. MEd, Dundee

(4) **Horsburgh, J** The importance of using diagnostic assessment procedures with "List D" pupils with particular reference to the area of social skills. MEd, Edinburgh

(5) **Hutchinson, Y** A longitudinal analysis of a child guidance centre. MAppSci, Glasgow

(6) **Kilgour, F Tom** A history of client and system failure. MSc, Edinburgh

(7) **Rea, D** "Failure to attend school regularly without reasonable excuse" — an enquiry into attitudes within schools and children's panels towards "truancy" and the way it is dealt with through the panel system. MEd, Edinburgh

(8) **Robinson, A** An investigation of the relationship between speech and conduct disorders. MEd, Dundee

(9) **Todd, R** The aims and objectives of the Scottish List D school: a study of staff perceptions of the goals of their institutions. MEd, Stirling

*see also* (85) **McArthur, S** (93) **McFarlane, A M**

**ASSESSMENT**

*Certification*

(10) **Bragg, A S** The "O" Grade English interpretation: a candidate for standard grade? MEd, Stirling

(11) **Clapperton, T A** Some contemporary issues in Scottish education, with reference to curriculum assessment and certification in the third and fourth years of secondary schooling. MEd, Edinburgh

(12) **Hutchison, I** All for assessment. MEd, Glasgow

(13) **MacDonald, C** Students' question choices in a national examination. MEd, Stirling

(14) **O'Grady, S M** The availability and use of resources in planning and implementing pilot courses in English at foundation level. MEd, Stirling

*see also* (97) **Krol, W** (31) **Rhodes, M C**

*Diagnostic*

(15) **Gallacher, D** An investigation into the use of structural communication assessments units in diagnostic testing in science. MEd, Glasgow

(16) **McIntyre, A R** Criterion referencing, mastery learning, and the school report. MEd, Stirling

(17) **Valentine, G** Diagnostic assessment: an analytical study of pupils' errors in vulgar fractions. MEd, Stirling

*see also* (4) **Horsburgh, J**

**CURRICULUM STUDIES** *(further divided by subject)*

(18) **Jackson, Sylvia** The implementation of curriculum innovation: an examination of the factors affecting the use of the Science 5-13 Project in trial schools after the trial period. PhD, 1985, Stirling

(19) **Treasurer, F D** Subject choice in second year: an investigation into pupils' subject choice decisions in a Scottish comprehensive school. MEd, Aberdeen

*Computing*

(20) **O'Donnell, M** Sex differences in attitudes towards and activities in computing and computing-related subjects. MEd, Glasgow

*English*

*see* (10) **Bragg, A S** (14) **O'Grady, S M**

*Environmental Studies*

*see* (67) **Moran, A M**

*Health*

(21) **Brown, R** The multi-disciplinary experiment: a study of the pre-pilot year of health studies in Grangemouth High School. MEd, 1985, Stirling

*Languages*

(22) **Johnson, D** Grammatical complexity as a predictor of L1 performance. MEd, Glasgow

(23) **Mackay, R** Classroom autonomy — with specific reference to the teaching and learning of English as a foreign language. MEd, Edinburgh

(24) **Stevenson, J B** Teachers' and pupils' perceptions of the published version of Tour de France Stage I MEd, Stirling

(25) **Taylor, C I** Sex role stereotyping in foreign language learning. MEd, Edinburgh

*see also* (72) **Newnham, J**

*Mathematics*

(26) **Finn, A M P** A study of the interpretation of practical work within the context of mathematics. MEd, Glasgow

*see also* (63) **Betteridge, D** (17) **Valentine, G**

*Music*

(27) **Slaughter, P** A preliminary investigation of criteria related to secondary school pupils' achievement in creative music activity. MEd, Edinburgh

(28) **Stevenson, W** Music in secondary school: some influences on literacy and expression. MPhil, 1982, Dundee

*Physical Education*

(29) **Davies, G E** The development and evaluation of a method of swimming instruction for primary schoolchildren. MEd, Stirling

(30) **Jones, A J** Programme planning in physical education in Scottish secondary schools: an investigation of three case-studies. MEd, Stirling

(31) **Rhodes, M C** Attitudes of school leavers and senior pupils to physical education as a national certificate subject: implications for course construction. MEd, Stirling

*Reading*

(32) **Danniilidou, N M** Reading and reading textbooks in the first grade of primary school in Greece. MEd, Stirling

*see also* (85) **McArthur, S** (86) **Pinheiro, A**

*Science*

*see* (15) **Gallacher** (97) **Krol, W**

*Religious Education*

*see* (41) **Wen, T**

*Social Education*

*see* (51) **Hitt, P D P**

*Writing*

*see* (66) **Michell, L**

**EDUCATION OVERSEAS**

(33) **Adejobi, I** A review of articles on Nigerian education. MEd, Aberdeen

(34) **Aboagye-Mensah** The development of education in Ghana. MEd, Aberdeen

(35) **Deeying, C** Equality of educational opportunity in Thailand. MSc, Edinburgh

(36) **Gunn, M C A** The development of scientific thinking in Egyptian children through a non-formal educational setting utilising teaching-mediated resource-based learning materials. MEd, Dundee

(37) **Illiamupu, R** Issues and problems in the development of university extension services in Zambia 1975-83. MSc, Edinburgh

(38) **Montiel-Canobra, H** Cultural dependence in Latin America: the education of the Peruvian Indian as a paradigm case. PhD, Dundee

(39) **Olufemi, J A** National policy in Nigeria: its content, analysis and implications for curriculum reality. MEd, Stirling

(40) **Ruhweza, A** Distance education in Uganda: a case study of a correspondence unit at Makerere University. MEd, Glasgow

(41) **Wen, T** The problem of curriculum in religious education. Studies in the development of curriculum in religious education for the junior and senior high school of Chang-Jung in Taiwan. MEd, Edinburgh

*see also* (32) **Danniilidou, N M**

## GUIDANCE

(42) **Doherty, P L** Perspectives on guidance: a case study. MEd, Stirling

*see also* (92) **Ker, B O**

## HISTORY OF EDUCATION

(43) **Clancy, K G** From prisons to schools: Jeremy Bentham's educational writings, 1791-1816. MEd, Glasgow

(44) **Laing, A F W** A socio-historical study of educational policy-making in Glasgow following the issue of Circular 600. MEd, Edinburgh

(45) **Wake, E R** Events antecedent to the founding of the Scottish Council for Research in Education. MEd, Edinburgh

*see also* (46) **Broadbent, R** (56) **Creighton, M A** (64) **Farquharson, E A**

## HOME AND SCHOOL

(46) **Broadbent, R** A history of the Council of Parent-Teacher Associations of Scotland, 1948-71. MEd, Glasgow

(47) **Chisholm, B** Drumpark parental involvement project. MAppSci, Glasgow

(48) **Smith, K** Home-school liaison: the homework dimension. MEd, Aberdeen

*see also* (81) **Hammill, P** (84) **Lees, C G**

## LEISURE

(49) **Di Maio, S** The impact of organisational change on adolescent subcultures with a sports and community centre. MEd, Aberdeen

(50) **Dyer, C S** Leisure preferences of young adolescents: provision and response. MEd, Aberdeen

(51) **Hitt, P D P** Education for leisure in the secondary school. MEd, Edinburgh

## ORGANISATION OF EDUCATION

*National level*

(52) **Dixon, F J** Staying on rates and pupil projection methods. MSc, Edinburgh

*see* (63) **Betteridge, D** (65) **Macaulan, C** (39) **Olufemi, J A**

*Local level*

(53) **Jeyes, G D** Political administration of secondary education in the Strathclyde Region. MEd, Stirling

*see also* (44) **Laing, A F W**

*Institutional level*

(54) **Boyd, B** Whole-school policies. MEd, Glasgow

*see also* (90) **Cowan, A M S** (77) **McGrath, A M I** (16) **McIntyre, A R** (78) **Maxwell, W S**

**POST COMPULSORY EDUCATION**

(55) **Allan, D** 16-18s in Scotland: an action plan. MEd, Edinburgh

(56) **Creighton, M A** An evaluation of the development and role of the WEA in Scotland. MSc, Edinburgh

(57) **Horner, D J** Universities and social responsibility: a case study of the University of Glasgow in relation to the community. MEd, Glasgow

(58) **Morrison, G** A critical analysis of the concept of needs in adult education. MSc, Edinburgh

(59) **Ross, M M B** The evolution of vocational further education in Scotland from 1956-72 as an administrative response to external socio-economic and political changes. MEd, Glasgow

(60) **Stokes, A** The education of the 16-19 age group: with special reference to the Tertiary College. MEd, Edinburgh

(61) **Strang, S** An examination into the factors which affect the relationships between retirement education and the psychology of ageing and development. MEd, Edinburgh

*see also* (75) **Collins, J** (37) **Illiampu, B** (31) **Rhodes, M C**

**PRE-SCHOOL EDUCATION**

(62) **McRae, E** Impulsiveness in nursery school children: its relationship with social class, age and sex in a Scottish sample. MEd, Glasgow

*see also* (91) **Crerar, A W** (99) **Kayes, E** (84) **Lees, C G**

**PRIMARY EDUCATION**

(63) **Betteridge, D** Planning and policy-making in primary school mathematics. MEd, Glasgow

(64) **Farquharson, E A** The Primary Memorandum revisited. MEd, Dundee

(65) **Macaslan, C** Perspectives on the role of the assistant head teacher in primary schools. MEd, Aberdeen

(66) **Michell, L** A writing scheme for juniors. MSc, Edinburgh

(67) **Moran, A M** The role of environmental education in the primary school today. MEd, Dundee

*see also* (47) **Chilsholm, B** (32) **Dunnillidou, N M** (29) **Davies, G E** (95) **Miller, D** (102) **Witcher, H**

**PSYCHOLOGY**

(68) **Anderson, C** A review of W Mischel's research on the delay of gratification and of his cognitive social learning personality theory. MEd, Edinburgh

(69) **Incecik, Janet** Children's concepts of death. MAppSci, Glasgow

(70) **Johnson, G A** Cognitive style and the effect of changing the type of content on syllogistic reasoning performance. MEd, Glasgow

(71) **Mannifield, R** "The failure of psychometrics" — a review of the literature. MEd, Edinburgh

(72) **Newnham, J** Learning language or language for learning. MAppSci, Glasgow

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